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ECOLAB INC.
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EXAMINER

DOUYON, LORNA M

ART UNIT PAPER NUMBER

1751

DATE MAILED: 03/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/754,491

Applicant(s)

GOHL ET AL.

Examiner

Lorna M. Douyon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on January 9, 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 23-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>9/30/04; 5/18/05</u> . | 6) <input type="checkbox"/> Other: _____ |

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-22, drawn to a method for treating laundry, classified in class 8, subclass 137.
 - II. Claims 23-32, drawn to a bleaching and antimicrobial composition, classified in class 252, subclass 186.25.
 - III. Claims 33-34, drawn to a laundry washing machine, classified in class 68, subclass 27.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and III are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the process as claimed can be practiced by hand.
3. Inventions II and I are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product. See MPEP § 806.05(h). In the instant case the product as claimed can be used in a materially different process such as in washing dishes.

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4. Inventions III and II are related as apparatus and product made. The inventions in this relationship are distinct if either or both of the following can be shown: (1) that the apparatus as claimed is not an obvious apparatus for making the product and the apparatus can be used for making a materially different product or (2) that the product as claimed can be made by another and materially different apparatus (MPEP § 806.05(g)). In this case the apparatus is not an obvious apparatus for making the product.

5. Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.

6. During a telephone conversation with Anneliese M. Seifert on March 8, 2006 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-22. Affirmation of this election must be made by applicant in replying to this Office action. Claims 23-34 have been withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

7. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Specification

8. The disclosure is objected to because of the following informalities:

a) on page 9, lines 22 and 29, two copending applications were cited: 10/739,922 and 10/600,091. It is suggested that the corresponding Publication Numbers be incorporated into each copending applications.

b) on page 22, line 30, the Application Serial Number is missing. It is also suggested that the corresponding Publication Number be cited.

c) on page 43, line 2, reference is made to "Figure 6", however, the drawings contain only Figures 1-5.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

9. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 lacks support for "the treatment composition" with respect to claim 1.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

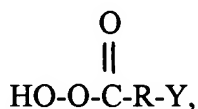
A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 1-2, 5-13, 15-17, 19-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Barnes (US Patent No. 4,988,363).

Barnes teaches a method for washing and cleaning of fabrics using a detergent composition containing an organic peroxyacid (which is an activator, and also equivalent to the bleaching and antimicrobial composition of the instant claims) in an effective amount to bleach said fabrics, a surfactant and a detergent builder each present in an effective amount to clean said fabrics, comprising the steps of contacting the fabric with an aqueous solution of said detergent composition at a pH of 9.5-11.0 for about 4-10 minutes, and thereafter acidifying the aqueous solution to a pH of 7.3-8.5 for the rest of the washing period (see claim 1). The latter pH inherently favors antimicrobial properties, considering the same peroxyacid is used. Generally, a washing time at the low pH range of 10 minutes to not more than 30 minutes will be sufficient (see col. 2, lines 59-60). The acidifying step is accomplished by adding an acid, e.g. sulphuric acid to the aqueous solution or wash liquor (see col. 3, lines 26-29). Alternatively, the acidifying is provided with a pH-profiling means, for example by using a sachet containing an acidic substance or encapsulated or coated acid particles which release the contents at a pre-determined time in the wash liquor (see col. 3, lines 30-34). The organic peroxyacid compounds used are the organic peroxyacids and water-soluble salts thereof having the general formula:



wherein R is an alkylene or substituted alkylene group containing 1- to 20 carbon atoms, and Y is hydrogen (see col. 5, lines 17-42). Other bleaching agents, e.g. hydrogen peroxide adducts,

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such as perborates or percarbonates, may also be incorporated as additional bleach, provided they do not affect the basic pH-profile principle (see col. 6, lines 31-35). Optical brighteners and perfumes can also be added in varying amounts as desired (see col. 6, lines 53-55). In Example 1, Barnes teaches pH-profiling experiments carried out in a Miele ® 423 washing machine (which is understood to have a draining step) using a detergent composition comprising sodium carbonate (equivalent also to the pH adjusting agent required in claim 10) and diperoxy dodecanedioic acid (DPDA), and 4 mmol/l H_2SO_4 were added at various times under the following wash conditions: 40°C heat-up cycle (20 minutes total wash time), 20° F.H. water for the main wash and 20° F.H. water in the rinse cycle, and the best combination of detergency and bleaching is clearly obtained if the wash is correctly profiled at a high pH for 4-10 minutes, particularly for 5-6 minutes, and subsequently at lower pH for the rest of the washing time (see col. 6, line 65 to col. 8, line 10). Barnes teaches the limitations of the instant claims. Hence, Barnes anticipates the claims.

12. Claims 1-2, 5-7, 11-13, 15-16, 20-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Macbeath (US Patent No. 5,716,923).

MacBeath teaches a method for cleaning soiled laundry in a washing machine comprising contacting said laundry with a wash solution formed by dispersing therein an effective amount of a composition comprising an alkali metal percarbonate bleach, peroxyacid bleach precursor (both being equivalent to the bleaching and antimicrobial composition of the instant claims) and an acidification agent, such that the initial pH of said wash solution prior to release of said acidification agent is from 9.5 to 13.0 (which should favor bleaching properties), and such that

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the pH of said wash solution is from 9.3 to 7.0 subsequent to complete release of said acidification agent (which should favor antimicrobial properties) (see claim 16; col. 2, lines 9-17), and which inherently provides a draining of the wash solution followed by a rinsing cycle. Typically, complete release of said acidification agent occurs in a time period of from 30 seconds to 10 minutes, preferably from 2 minutes to 8 minutes, most preferably from 3 minutes to 7 minutes after introduction of the composition to the wash solution (see col. 4, lines 23-31). The acidification agent is coated to provide the delayed release (see col. 4, lines 32-40). Fabric softening agents can also be incorporated into the detergent composition (see col. 13, lines 55-58), as well as perfumes (see col. 14, line 22). McBeath teaches the limitations of the instant claims. Hence, MacBeath anticipates the claims.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

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invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

15. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barnes as applied to the above claims, and further in view of Reinwald et al. (US Patent No. 4,118,189), hereinafter "Reinwald".

Barnes teaches the features as described above. Barnes, however, fails to disclose washing the laundry with a detergent use solution from the laundry washing machine prior to the step of applying the detergent containing peroxyacid, or draining at least a portion of the detergent use solution from the laundry washing machine prior to the step of applying the detergent containing peroxyacid.

Reinwald teaches a washing process which can be carried out in several, preferably two steps, replacing the wash liquid in between and this method is recommended particularly for greatly soiled wash (see col. 4, lines 5-7). The first stage, the so-called pre-wash cycle, can be carried out in known manner which serves primarily to remove coarse soil, the prewash liquor is removed before the start of the main wash cycle (see col. 4, lines 7-18). The method is carried out by using conventional cleaning compositions which include bleaching agents and bleach activators (see col. 4, lines 38-48).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to subject the laundry of Barnes to a pre-wash cycle, remove the prewash liquor, prior to the main wash cycle because this would remove coarse soil as taught by Reinwald.

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16. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barnes as applied to the above claims, and further in view of Werdehausen et al. (US Patent No. 3,718,597), hereinafter "Werdehausen".

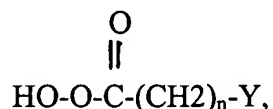
Barnes teaches the features as described above. Barnes, however, fails to disclose a halogen bleach like chlorinated trisodium phosphate or sodium hypochlorite.

Werdehausen teaches the equivalency of alkali metal perborates and percarbonates with chlorinated trisodium phosphate or alkali metal hypochlorite as bleaching agents in a similar method (see claim 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the perborates or percarbonates of Barnes with chlorinated trisodium phosphate or alkali metal hypochlorite because the substitution of art recognized equivalents as shown by Werdehausen is within the level of ordinary skill in the art.

17. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barnes as applied to the above claims.

Barnes teaches the features as described above. In addition, Barnes teaches that when the organic peroxyacid is aliphatic, the unsubstituted acid may have the general formula:



wherein Y can be hydrogen and n can be an integer from 6 to 20 (see col. 5, lines 43-58). Barnes, however, fails to specifically disclose peroxyacid having 8 carbon atoms, that is, peroxyoctanoic acid.

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected peroxyoctanoic acid as the specific peroxyacid because this is one of the suitable peroxyacids taught by Barnes. In addition, product claims with numerical ranges which overlap prior art ranges were held to have been obvious under 35 USC 103, *In re Wertheim* 191 USPQ 90 (CCPA 1976); *In re Malagari* 182 USPQ 549 (CCPA 1974); *In re Fields* 134 USPQ 242 (CCPA 1962); *In re Nehrenberg* 126 USPQ 383 (CCPA 1960).

Conclusion

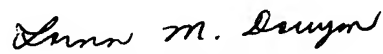
18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references are considered cumulative to or less material than those discussed above.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lorna M. Douyon whose telephone number is (571) 272-1313. The examiner can normally be reached on Mondays-Fridays from 8:00AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on (571) 272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Lorna M. Douyon
Primary Examiner
Art Unit 1751